Creaking, at other times, as when a sail strikes against the mast or flaps before the wind

Partly whizzing, partly as when a sail flaps before the wind As when a sail flaps before the wind

Christiania, September 16

As when a thunder-clap passed over us from west to east Soft crackling, as from electric sparks from an electrical machine

As when stroking a cat's back against the hairs

Sophus Tromholt

A White Swallow

DURING our walk to-day on the Kendal Road, near Heversham, my brother and I were very much surprised to see a white swallow amongst a number of the ordinary kind. The bird's plumage was entirely white, except the lower part of the breast, which was greyish.

We are quite sure of its identity, as it flew around us several

times.

Can you tell us whether a white swallow is really an uncommon sight?

MARY BRIGGS

Sandside, near Milnethorpe, Westmoreland, September 4

THE HUME COLLECTION OF ASIATIC BIRDS

FOR some time past the interest of ornithologists has been aroused by the rumour that Mr. A. O. Hume, of Simla, had offered, or intended to give, his celebrated collection of Asiatic Birds to the Trustees of the British Museum; and I am glad to be able to inform the readers of NATURE that the whole of this collection is now safely housed in the Natural History Museum, the second half having been delivered by the P. and O. Company on the 18th of last month.

Those of our readers who are not ornithologists may wish to learn something in the first place about the collec-

tion itself and its generous donor.

Mr. A. O. Hume, C.B., occupied formerly a high position in the Bengal Civil Service, and devoted for many years his leisure hours to the study of ornithology, and especially of the birds of India. His aim was to form a collection of birds of every part of the British Asian Empire, in which every species should be represented by a complete series of specimens illustrating its range and its variations of colour according to age, season, or locality. For this purpose he organised a system under which a great number of local observers and collectors (in some years numbering nearly 100) worked for and He fitted out expeditions with a staff of collectors and taxidermists, under his own leadership or that of his able former curator, Mr. Davison, into Scinde, Coorg, Manipur, the Malayan Peninsula, Tennasserim, and the Andaman and Nicobar Islands; he acquired by purchase or donation the Mandelli collection from Sikkim and Tibet, Brook's beautiful series from North-Western and Central India, Adam's Sambhur birds, Bingham's collections from Delhi and Tennasserim, Scully's collection from Turkestan. The expense incurred in forming this collection was in proportion to the enthusiasm with which Mr. Hume worked. He had built at Simla a museum for the reception of the collection which should finally form the basis for the preparation of a comprehensive work on the avifauna of the vast region which he was exploring. But whilst thus engaged Mr. Hume, with his wonderful activity and ready pen, which had rendered him facile princeps in all matters regarding Indian ornithology, published numerous papers in an ornithological periodical, Stray Feathers, which he founded and conducted for ten or eleven years, as well as several separate works—viz. "Notes on the Indian Raptores," "Nests and Eggs of Indian Birds," "List of the Birds of India,"

"Game Birds of India, Burmah, and Ceylon," and others.
However, during the last few years naturalists, to their great regret, became aware that Mr. Hume's interest in ornithology began to yield to other important matters of

social and political nature; and finally, the grievous loss by theft of an enormous mass of ornithological manuscripts, comprising his materials for "The Birds of the British Asian Empire," and the whole of his Museum Catalogue, contributed to his determination to abandon his intention of working out his collection, and to present it to some museum where others might utilise the materials he had collected.

It is very gratifying that Mr. Hume, "considering the British Museum as the one that has most claims upon him, and Mr. Sharpe as the man most capable in Europe of doing justice to the collection," offered to present it to the Trustees of that institution. The Trustees, fully aware of the scientific importance of the collection, had no hesitation in accepting the offer. Still, before actually transferring the collection, Mr. Hume was desirous of completely rearranging and placing it in thorough good order, and also of preparing at the same time a Catalogue of the Birds of the Indian Empire containing the results of his long and careful studies. Unfortunately this project could not be carried out owing to the difficulty of finding a competent coadjutor in the work, or rather of obtaining the means of properly remunerating such a person. And as there was great risk in leaving the collection without due curatorial supervision exposed to the deteriorating influences of another rainy season in India, the Trustees obtained Mr. Hume's consent to transmitting the collection without further delay to England.

Mr. Sharpe, who is always ready to sacrifice his personal comfort to duty, started for Simla almost at a moment's notice, and although, unseasoned as he was, he had to travel and work during the hottest part of the year, he seems to have infused his energy into all who had to help him in the gigantic task of packing the collection. He started on April 25, arrived in Simla on May 21, completed his work by the end of June, and returned to the Museum on August 15, having the satisfaction to find on his return the half of the collection which had preceded him safely lodged in the Museum, while the other half was delivered a week later without loss of, or damage

to, any of the cases.

The collection comprises about 400 skins of mammals, 63,000 skins of birds, 300 nests, and 18,500 eggs. It was packed in eighty-two cases, the majority with a capacity of 30 cubic feet. Even to those who are used to the inspection of large collections, these figures can hardly convey a correct idea of the magnitude of this addition to the National Museum. Mr. Hume may truly say that such a collection has never been made before; and such will probably never be made again. Each specimen is enveloped in a brown paper wrapper with the name of the species and locality written on the outside, proper labels being, besides, attached to the specimen. The skins themselves are in excellent condition, and, thanks to the precautions taken by Mr. Sharpe, they are not likely to harbour or to develop destructive inmates. Specimens which had suffered from damp or insects and to which no special interest was attached, were eliminated during packing.

The scientific value of the collection, of course, is not to be measured by the number of specimens only, but by the judgment which determined their selection, by the history attached to many of them, and by the completeness of the series. We may reasonably assume that it contains about 2000 species, so that on an average each species is represented by some thirty specimens, which number in the majority of the cases would not go beyond a fair illustration of its range and variation. Therefore the number of duplicates which will be eliminated by Mr. Sharpe during the progress of the examination will probably be much smaller than one might anticipate on a superficial inspection; and I need not say that Mr. Hume's earnest wish that the series which he has brought together with so much discrimination and care should remain

intact, will be strictly carried out. No doubt a considerable number of duplicates will be eliminated, and, according to the wish of the donor, of these a complete set has to be transmitted to the Museum of Comparative Zoology of Harvard College, whilst the remainder are to be utilised for the benefit of the ornithological collection generally.

Ornithologists need not go many years back in recalling to their memory the extent of the collection which the late Mr. G. R. Gray had arranged in such a handy fashion in and about his study in the old building at Bloomsbury. What was then regarded a good reference collection has since been enriched by the addition of the Wallace collection from the Indian Archipelago, Capt. Pinwill's Malayan birds, Sharpe's African collection, the Gould collection, Salvin and Godman's European, Australian, and American collections, the Sclater collection, and now by this immense collection from every part of the Indian Empire. Years of unremitting labour will be required to get these vast materials into order and to work them out in a manner which will satisfy the aims of so advanced a branch of science as ornithology is at the present day. ALBERT GÜNTHER

THE FORSTER HERBARIUM

BOTANISTS will learn with pleasure that this herbarium, a portion of the collections of Cook's second voyage, has been acquired by exchange from the Liverpool Corporation for the Kew Herbarium; and it will be incorporated in the general collection. From the introduction to the "Catalogue of Plants" in the Botanic Gardens at Liverpool, published in 1808, it appears that the proprietors of that establishment possessed, at that date, about 3000 specimens of dried plants, "collected by the late Dr. Forster in his voyages to the South Seas, with large and valuable contributions from his friends and correspondents." How these plants came into their possession is uncertain, but they could hardly have been presented to them by Mr. Shepherd, the Curator, as stated by Sir Joseph Hooker in the introductory essay to his "Flora Novæ-Zealandiæ," or his name would almost certainly have been mentioned as the donor. At least this may be inferred, because on the very next page a very high tribute is paid to Mr. John Shepherd for his services to the Garden. Be that as it may, the collection will shortly be accessible to botanists generally, thanks to the perseverance of Sir Joseph Hooker and the sensible view of the matter taken by the present members of the Corporation when it was represented to them that these dried plants were practically useless where they were, but would be valuable at a botanical establishment like This act of the Corporation deserves to be recorded, because some thirty years ago, when Sir Joseph Hooker was engaged writing his "Flora Novæ-Zealandiæ," he applied to the then custodians of the collection to transmit it temporarily to Kew for comparison and publication, and his request was refused

Botanical investigations in connection with the Challenger expedition again brought to mind the existence of this interesting collection at Liverpool, and it was determined to make another effort to rescue it from oblivion, which was fortunately successful. A few words respecting the botanical collections of Cook's voyages generally, and of this one in particular, will be welcome to those interested in botany. Sir Joseph Banks and Dr. Solander accompanied Capt. Cook on his first voyage round the world: John Reinhold Forster and George Forster, father and son, were the botanists of the second voyage (1772-75), and Mr. Anderson, the surgeon of the expedition, collected a little on the third voyage. From a statement in Sparmann's "Travels in South Africa," it seems that Forster the elder undertook the duties of naturalist to the expedition for the sum of 4000l., and he took his son with him, then only seventeen years old, as

an assistant. On arriving at the Cape of Good Hope they fell in with Sparmann, who, at the instance and expense of Forster, was added to the scientific staff, and continued with them until the return to the Cape in 1775. Considerable collections of plants were made in New Zealand, many parts of Polynesia, and the extreme south of America, and smaller collections in some of the Atlantic Islands, including St. Helena, Cape Verd Islands. and Canaries. On returning to England the Forsters soon commenced publishing the botanical results of the expedition, and an authenticated set of all the published plants at least was deposited in the British Museum. The Cape plants, however, which they did not publish, are apparently not represented there. The first botanical work, "Characteres Genera Plantarum," appeared in 1776, and the title-page bears the names of both father and son, and this was the only one published in England. For the rest, the botany was done by the son alone. His "Florula Insularum Australium Prodromus" appeared at Göttingen in 1786, and "De Plantis Esculentis Insularum Oceani Australis" at Berlin in the same year, followed by "De Plantis Magellanicis et Alanticis" at Göttingen in 1787.

These works, we believe, constitute the whole of the published botany of the expedition, and, though very meagre, are extremely interesting, being the foundation of our knowledge of New Zealand, Antarctic, and Polynesian vegetation. The collection now acquired for Kew is excellently preserved, and the plants mostly named and It comprises altogether 1359 species, 785 of which were collected on the voyage with Cook, and the rest, from various parts of the world, are probably some of those alluded to above as having been presented to Forster by his friends. The collection includes a large proportion of the plants published by the Forsters, but it is not complete. Roughly, there are 187 species from Polynesia, 119 from New Zealand, 21 from the extreme south of America, 23 from the Atlantic Islands, including all those described by Forster from St. Helena, and 9 from Australia. Besides the foregoing, which are all phanerogams, there are 36 ferns, but they include only a small portion of the species described by Forster.

In addition to this botanical work George Forster's name appears on the second title-page of the Narrative of the second voyage as joint author with James Cook. He died, a violent death, we believe, at Paris in 1794, four years before the decease of his father. The philosophical writings of the latter, entitled "Observations made during a Voyage round the World," London, 1778, deserve special mention W. BOTTING HEMSLEY

THE INTERNATIONAL METEOROLOGICAL COMMITTEE

THIS Committee held its third meeting in Paris at the Ministry of Public Instruction on September 1 to 8. The Meeting was attended by the President, Prof. Wild (Russia); the Secretary, Mr. R. H. Scott; Profs. Buys Ballot (Holland), Hann (Austria), Mascart (France), Mohn (Norway), Dr. Neumayer (Germany), and Prof. Tacchini M. de Pinto Capello (Portugal), the only remaining member, was unfortunately unable to be present.

In addition certain gentlemen were present by invitations at some of the meetings, among these we may mention Brigadier-General Hazen (Chief Signal Officer, U.S.A.), Prof. Hildebrandsson (Upsala), and M. Leon Teisserenc de Bort.

The following is a brief notice of the most important subjects discussed, with the action taken on each.

A valuable report on cirrus observations by the Committee appointed at Copenhagen (1882), MM. Capello, Hildebrandsson, and Ley, was submitted, and will be printed.

The subject of Atlantic telegrams was discussed with General Hazen. It was decided to maintain the present